

## Darwin's Theory Notes Review

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Group: \_\_\_\_\_ Section: \_\_\_\_\_



- 1) List **three** general kinds of observations that Darwin made during the voyage of the Beagle.
  
  
  
  
  
  
  
  
  
  
- 2) What is an adaptation? Explain how the finches Darwin observed demonstrated adaptation.
  
  
  
  
  
  
  
  
  
  
- 3) How does selective breeding support Darwin's hypothesis?
  
  
  
  
  
  
  
  
  
  
- 4) How do variation and natural selection work together to help cause evolution?
  
  
  
  
  
  
  
  
  
  
- 5) Suppose the climate in an area becomes much drier than it was before. What kinds of variations in the area's plants might be acted on by natural selection?

## Natural Selection Performance Task

### Directions:

1. Have Technician get your materials.
2. Using the materials provided, design a simulation of natural selection that could be shown to younger kids so that they too can understand what natural selection is.
3. Write a clear set of rules for your simulation so that anyone could follow it and understand how it relates to natural selection.

Hint: Each bead can represent an individual in a population and each color can represent a phenotypic trait. Each cloth can represent a different environment. Students can, for an example, show the process of natural selection through predation by having a group member act as the “predator” to pick up as many beads as he can in a 10 second interval. Then the remaining individuals could reproduce to have some offspring, or add a few more of the surviving beads’ colors, and repeat the process a set amount of times.

### Materials:

- one index card
- one paper filter
- one paper towel
- one container of beans
- one container of stones
- one container of shells
- Table Bin

### Simulation:

Rules of Simulation	Explanation of Rules